Congressional Research Service
Informing the legislative debate since 1914

An Examination of Student Loan Interest Rate Proposals in the 113th Congress

Updated July 26, 2013

Congressional Research Service
https://crsreports.congress.gov
R43094

CRS REPORT
Prepared for Members and
Committees of Congress

Summary

The interest rates that borrowers pay on federal student loans made through the William D. Ford Federal Direct Loan program are specified in statutory language of the Higher Education Act of 1965, as amended. For the past two years, one type of loan—Direct Subsidized Loans—has been made with a fixed interest rate of 3.4%. Effective July 1, 2013, Direct Subsidized Loans began to be made with a fixed interest rate of 6.8%. Direct Unsubsidized Loans are currently being made with a fixed interest rate of 6.8% and Direct PLUS Loans are currently being made with a fixed interest rate of 7.9%.

In the 113th Congress, numerous proposals have been made that would affect the interest rates that borrowers pay on student loans made through the Direct Loan program. These include long-term proposals to establish a new interest rate structure for all Direct Loans made during future years, and short-term proposals to temporarily extend the authority to make Direct Loans at the rates currently in effect. Several of the long-term student loan interest rate proposals would amend the Direct Loan program to index student loan interest rates to market indices, such as the rate on 10-year Treasury notes. Some policy options would establish a market-indexed, fixed interest rate structure, while others would establish a market-indexed, variable interest rate structure.

In his FY2014 budget, President Obama proposed a market-indexed, fixed interest rate structure that would apply to Direct Loans made in future years. On May 23, 2013, the House passed H.R. 1911, which would establish a market-indexed, variable interest rate structure for new Direct Loans.

Numerous proposals were introduced in the Senate. Some bills would make short-term changes to student loan interest rates and would affect only Direct Subsidized Loans. S. 953 would extend for two years the authority to make Direct Subsidized Loans with a fixed interest rate of 3.4%. S. 897 would set the borrower interest rate on new Direct Subsidized Loans made only during the upcoming federal student aid award year at the Federal Reserve discount window primary credit rate. Other bills would establish a new market-indexed, fixed interest rate structure for Direct Loans made in future years. These include S. 1003 and the Senate amendment to H.R. 1911. On July 24, 2013, the Senate passed the amendment to H.R. 1911.

This report describes and analyzes student loan interest rate proposals that have been made in the 113th Congress to establish new policies for setting the interest rates that borrowers will pay on loans made through the Direct Loan program. The report compares and contrasts selected loan interest rate policy options and provides information on proposed student loan interest rate structures, projections of future interest rates, and estimates of future costs to the government. The report also presents estimates of borrower repayment amounts associated with the different interest rate proposals based on case simulations for three types of typical borrowers: undergraduate dependent students, undergraduate independent students, and parent borrowers.

Finally, the report highlights some of the perennial tensions that often arise when student loan interest rates are debated. Should federal student loan programs provide below-market or fair-market interest rates to borrowers? What value is ascribed with providing borrowers predictable fixed monthly payments as opposed to payments that may vary in accordance with market conditions? To what extent should the federal government seek to subsidize loans or borrower repayment and for what subset of borrowers should subsidies be available?

Contents

Figures

Tables

Appendixes

Contacts

Introduction

The William D. Ford Federal Direct Loan (Direct Loan) program is the primary federal student loan program administered by the U.S. Department of Education (ED). It is authorized by Title IV of the Higher Education Act of 1965, as amended (HEA; P.L. 89-329). Four types of federal student loans are currently made available through the Direct Loan program: Federal Direct Stafford Loans (Direct Subsidized Loans), Federal Direct Unsubsidized Stafford Loans (Direct Unsubsidized Loans), Federal Direct PLUS Loans, and Federal Direct Consolidation Loans.[1]

The interest rates that borrowers pay on federal student loans and other loan terms and conditions are specified in statutory language of the HEA and in regulations promulgated by ED. Throughout the history of the federal student loan programs, numerous changes have been made to the statutory provisions that specify the criteria for setting the interest rates paid by borrowers.[2] At present, different fixed interest rates apply to each of the types of loans currently being made.

Under current law, during award year (AY)[3] AY2013-2014, Direct Subsidized Loans are being made with a fixed rate of 6.8%. Under the College Cost Reduction and Access Act of 2007 (CCRAA; P.L. 110-84), the fixed interest rates applicable to newly made Direct Subsidized Loans had been incrementally lowered over a period of several years from 6.8% to 3.4%; however, the 3.4% interest rate was not made permanent. Under the Moving Ahead for Progress in the 21st Century Act (MAP-21; P.L. 112-141), the authority to make Direct Stafford Loans with a 3.4% interest rate was extended through AY2012-2013. This authority expired June 30, 2013, after which Direct Subsidized Loans made for AY2013-2014 and future years will have a fixed interest rate of 6.8%.

Under current law, Direct Unsubsidized Loans are being made with a fixed rate of 6.8%, and Direct PLUS Loans are being made with a fixed rate of 7.9%. Direct Consolidation Loans are made with a fixed rate that is the weighted average of the interest rates of the loans being consolidated, rounded up to the next higher one-eighth of 1%.

The 113th Congress is considering a range of proposals applicable to student loan interest rates. These include proposals to temporarily extend the current 3.4% interest rate on Direct Subsidized Loans as well as long-term proposals to establish a new interest rate structure for all loans made through the Direct Loan program during AY2013-2014 and future years.[4]

This report examines the interest rates borrowers are charged on federal student loans made through the Direct Loan program. It provides a brief summary of the current, statutorily specified, fixed interest rate structure applicable to loans currently being made. This is followed by brief

[1] For more detailed information on FFEL and DL program loans, see CRS Report R40122, *Federal Student Loans Made Under the Federal Family Education Loan Program and the William D. Ford Federal Direct Loan Program: Terms and Conditions for Borrowers*, by David P. Smole.

[2] A detailed history of the interest rates that have been in effect on loans made through the FFEL and Direct Loan programs is presented in Appendix B of CRS Report R40122, *Federal Student Loans Made Under the Federal Family Education Loan Program and the William D. Ford Federal Direct Loan Program: Terms and Conditions for Borrowers*, by David P. Smole.

[3] Federal student aid, such as Direct Loans, are generally made available, or awarded, to students on an award year basis. Federal student aid award years begin on July 1, and end on June 30 of the following calendar year.

[4] A distinguishing characteristic of Direct Subsidized Loans is that they are awarded on the basis of a student's financial need and that they include a more generous subsidy to the borrower than other types of Direct Loans. Importantly, the government subsidized the interest that accrues on Direct Subsidized Loans while the borrower is enrolled in school on at least a half-time basis and during periods of authorized deferment.

descriptions of proposals that have been made during the 113th Congress to either temporarily extend the authority to make Direct Subsidized Loans with a fixed 3.4% interest rate or to establish a new interest rate structure for Direct Loans made during AY2013-2014 and future years.[5] Several proposals are reviewed: the President's FY2014 budget proposal, H.R. 1911, S. 953, S. 1003, S. 897, and the Senate amendment to H.R. 1911. For each proposal, information is presented showing a summary of the proposed interest rate structure, projections of future interest rates, and estimates of the interest expenses typical borrowers might be expected to pay if currently projected interest rates applied for future years. The report concludes with a discussion of factors that might be considered when weighing alternative student loan interest rate policy options.

Student Loan Interest Rates under Current Law

Legislation enacted in 2002 (P.L. 107-139), contained provisions that led to a transition over a period of several years to the current fixed interest rate structure for student loans. With fixed rate loans, the interest rate that is in effect at the time the loan is made remains in effect until the loan is paid in full. The amendments to the HEA enacted under P.L. 107-139 affected the interest rate structure for student loans that would be made during AY2006-2007 and later years. Direct Subsidized Loans and Direct Unsubsidized Loans would have a fixed interest rate of 6.8%; and all Direct PLUS Loans would have a fixed rate of 7.9%.

In 2007, under the CCRAA, incrementally lower fixed interest rates were established for Direct Subsidized Loans to be made to undergraduate students during the four-year period spanning AY2008-2009 through AY2011-2012.[6] The CCRAA did not make any changes to the interest rate specified for Direct Subsidized Loans made to undergraduate students beyond that period, which would be made at 6.8%. In 2012, under MAP-21, the authority to make Subsidized Stafford Loans with a 3.4% interest rate was extended to apply to loans made during AY2012-2013.[7] Under current law, a fixed interest rate of 6.8% will apply to Direct Subsidized Loans made during AY2013-2014 and future years. A summary of the fixed interest rates applicable to Direct Loans made during AY2006-2007 through AY2013-2014 is presented below in **Table 1**.

Table 1. Interest Rates on Direct Loans, by Loan Type

Fixed Interest Rates on Loans Made from AY2006-2007 through AY2013-2014

Award Year	Direct Subsidized (Undergraduate)	Direct Subsidized (Graduate)	Direct Unsubsidized	Direct PLUS
2006-2007	6.8	6.8	6.8	7.9
2007-2008	6.8	6.8	6.8	7.9
2008-2009	6.0	6.8	6.8	7.9
2009-2010	5.6	6.8	6.8	7.9

[5] The proposals examined here are ones that have received considerable attention in legislative deliberations and/or ones for which CRS has received a high volume of requests for review and analysis.

[6] These lower interest rates were offset by savings in mandatory spending generated by changes made to the FFEL program; however, the savings were not sufficient to pay for reduced interest rates on loans made during subsequent award years. For additional information on amendments made to the HEA by the CCRAA, see CRS Report RL34077, *Student Loans, Student Aid, and FY2008 Budget Reconciliation*, by Adam Stoll, David P. Smole, and Charmaine Mercer.

[7] For additional information on amendments to student loan interest rates made by MAP-21, see CRS Report R42515, *Interest Rates on Subsidized Stafford Loans to Undergraduate Students*, by David P. Smole.

Award Year	Direct Subsidized (Undergraduate)	Direct Subsidized (Graduate)	Direct Unsubsidized	Direct PLUS
2010-2011	4.5	6.8	6.8	7.9
2011-2012	3.4	6.8	6.8	7.9
2012-2013	3.4	n/a[a]	6.8	7.9
2013-2014[b]	6.8	n/a[a]	6.8	7.9

Source: HEA, Section 455.

Notes: During this period, the interest rate on Direct Consolidation Loans is determined by taking the weighted average of the interest rates of the loans being consolidated, and rounding up to the next higher one-eighth of 1%.

a. Beginning with AY2012-2013, Direct Subsidized Loans are no longer available to graduate and professional students.

b. Under current law, the rates presented here apply for loans made during AY2013-2014 and future years.

Legislation in the 113th Congress

In the 113th Congress, numerous proposals have been made to amend or extend current policy for establishing the interest rates that borrowers pay on federal student loans made through the Direct Loan program. Brief descriptions of several of these proposals are provided below. This is followed by a side-by-side comparison of the proposals, presented in **Table 2**.

President's FY2014 Budget Proposal

President Obama's FY2014 budget would establish a market-indexed, fixed interest rate structure for all Direct Subsidized Loans, Direct Unsubsidized Loans, and Direct PLUS Loans made during AY2013-2014 and future years.[8] Under the President's proposal, the interest rate in effect for the award year during which the loan is made would remain the same from the time the loan is disbursed until it is paid in full. On an annual basis, a new fixed interest rate would be established for loans to be made during the upcoming award year. The interest rate would be indexed to the rate on the 10-year Treasury note at the beginning of the award year; and would be increased by a margin, or interest rate add-on, that would differ by loan type. There would be no cap to limit the maximum interest rate a borrower could be charged.

Under this proposal, the interest rate on Direct Subsidized Loans would be the 10-year Treasury note rate, plus 0.93 percentage points; the interest rate on Direct Unsubsidized Loans would be the 10-year Treasury note rate, plus 2.93 percentage points; and the interest rate on Direct PLUS Loans would be the 10-year Treasury note rate, plus 3.93 percentage points. Under the President's proposal, individuals who borrow multiple types of loans (e.g., Direct Subsidized and Direct Unsubsidized), or who borrow loans over a period of successive years would likely have different fixed interest rates on each of their loans.

The President's proposal would also remove the interest rate cap on Direct Consolidation Loans. Thus, the interest rate on Direct Consolidation loans would be determined by taking the weighted average of the interest rates on the loans being consolidated and rounding the rate up to the nearest higher one-eighth of 1%.

[8] U.S. Department of Education, FY2014 Department of Education Justifications of Appropriation Estimates to the Congress, Volume II, Student Loans Overview, p. S-13. (Hereinafter referred to as ED, FY2014 Budget Justifications, "Student Loans Overview.")

In conjunction with this student loan interest rate proposal, the President also proposed several other student loan-related changes, including the expansion of eligibility for borrowers to repay according to the Pay As You Earn (PAYE) repayment plan, and the exclusion from taxation of student loan balances forgiven after completing the maximum required repayment period under the income-based repayment (IBR) and income-contingent repayment (ICR) plans. Under the PAYE repayment plan (which is one version of the ICR plan), borrowers' monthly student loan payments are limited to no more than 10% of their discretionary income, and any student loan balance that remains 20 years after entering repayment is forgiven.[9] The President proposes to extend the PAYE repayment plan to all borrowers of Direct Loans, regardless of when they first obtained their loans.[10] In addition, while at present, any student loan balance that is forgiven following the culmination of repayment according to the IBR or ICR plans is considered part of an individual's gross income and thus subject to the individual income tax, the President proposes that any such amounts forgiven after December 31, 2013 would be excluded from gross income, and thus exempt from taxation.[11]

CBO estimates that enactment of the President's FY2014 Budget student loan interest rate proposal would *increase* direct (mandatory) spending by $29.8 billion over the period of FY2013-FY2018; and would *reduce* direct spending by $6.7 billion over the period of FY2013-FY2023.[12] According to CBO, the President's proposed expansion of the PAYE repayment plan, if enacted, would increase direct spending by $3.6 billion, all in FY2013. The Joint Committee on Taxation estimates that the President's proposal to provide an exclusion from income of amounts forgiven following repayment according to the IBR or ICR plans would have no effect on revenues over the period of FY2013-FY2018; and would lead to a reduction in revenues of $5 billion over the period of FY2013-FY2023.[13]

H.R. 1911, the Smarter Solutions for Students Act

H.R. 1911 would establish a market-indexed variable interest rate structure for Direct Subsidized Loans, Direct Unsubsidized Loans, and Direct PLUS Loans made during AY2013-2014 and future years. The interest rates on these loans would be indexed to the rate on the 10-year Treasury note as of the last auction held prior to June 1; and rates would adjust once per year on July 1. The interest rate on Direct Subsidized Loans and Direct Unsubsidized Loans would be the 10-year Treasury note rate, plus 2.5 percentage points, with a cap, or maximum rate, of 8.5%; and the rate on Direct PLUS Loans would be the 10-year Treasury note rate, plus 4.5 percentage points, with a cap of 10.5%.

H.R. 1911 would provide borrowers with the option of obtaining a fixed interest rate on their federal student loans by consolidating one or more loans into a Direct Consolidation Loan. On a Direct Consolidation Loan, the fixed interest rate would be the weighted average of the interest

[9] For a description of the IBR, ICR, and PAYE repayment plans, see CRS Report R40122, *Federal Student Loans Made Under the Federal Family Education Loan Program and the William D. Ford Federal Direct Loan Program: Terms and Conditions for Borrowers*, by David P. Smole.

[10] U.S. Department of Education, FY2014 Department of Education Justifications of Appropriation Estimates to the Congress, Volume II, Student Loans Overview, p. S-14.

[11] Office of Management and Budget, Budget of the United States Government, Fiscal Year 2014, Analytical Perspectives: Federal Receipts, p. 196.

[12] Congressional Budget Office, An Analysis of the President's 2014 Budget, "CBO's Reestimate of the President's 2014 Mandatory Proposals for Postsecondary Education," May 17, 2013.

[13] Joint Committee on Taxation, Estimated Budget Effects of the Revenue Provisions Contained in the President's Fiscal Year 2014 Budget Proposal, JCX-11-13, May 10, 2013.

rates on the loans being consolidated, rounded up to the nearest higher one-eighth of 1%, but with no cap. Direct Consolidation Loans would continue to be available to borrowers after entering repayment on their loans.

CBO estimates that the enactment of H.R. 1911 would *reduce* direct spending by approximately $1.0 billion over the period of FY2013-FY2018; and would *reduce* direct spending by $3.7 billion over the period of FY2013-FY2023.[14]

On May 23, 2013, the House passed H.R. 1911 by a vote of 221 to 198. The Obama Administration has indicated that if the President were to be presented with H.R. 1911 in its current form, it would recommend his veto.[15]

S. 953, the Student Loan Affordability Act

S. 953 would extend the authority to make Direct Subsidized Loans with a fixed 3.4% interest rate for award years AY2013-2014 and AY2014-2015. S. 953 would not affect the interest rate on other loans, nor loans made in future years. Thus, under S. 953, Direct Subsidized Loans would be made with a fixed 6.8% interest rate during AY2015-2016 and future years.

In addition, Direct Unsubsidized Loans made during AY2013-2014 and future years would have a fixed rate of 6.8%, and Direct PLUS Loans made during AY2013-2014 and future years would have a fixed rate of 7.9%. S. 953 would also retain the current formula for determining the interest rate on Direct Consolidation Loans.

S. 953 would make changes to other laws to offset the cost of the two-year extension of the 3.4% interest rate on Direct Subsidized Loans. It would amend the Internal Revenue Code of 1986 (IRC) to modify required distribution rules for pension plans; establish special rules for expatriated entities; and modify provisions of the Oil Spill Liability Trust Fund tax.

CBO estimates that the enactment of S. 953 would lead to a net *increase* in deficits of $5.9 billion over the period of FY2013-FY2018 as a result of changes in revenues and direct spending; and that it would lead to a net *decrease* in deficits of $330 million over the period of FY2013-FY2023.[16] The two-year extension of the authority to make Direct Subsidized Loans with a fixed rate of 3.4% would *increase* direct spending by $8.3 billion over both the FY2013-FY2018 and FY2013-FY2023 periods. This increase would occur primarily during the period of FY2013-FY2015. The changes to the IRC would result in increased revenues over both the FY2013-FY2018 and the FY2013-FY2023 periods and would offset the increase in direct spending.

S. 1003, the Comprehensive Student Loan Protection Act

S. 1003[17] would establish a market-indexed, fixed interest rate structure for Direct Subsidized Loans, Direct Unsubsidized Loans, and Direct PLUS Loans made during AY2013-2014 and future years. Under S. 1003, the interest rate in effect for the award year during which the loan is made would remain the same from the time the loan is disbursed until it is paid in full. On an annual basis, a new fixed interest rate would be established for loans to be made during the upcoming award year. The interest rate on Direct Subsidized Loans, Direct Unsubsidized Loans, and Direct PLUS Loans would be the 10-year Treasury Note rate, as of the last auction held prior

[14] Congressional Budget Office, Cost Estimate, "H.R. 1911, Smarter Solutions for Students Act," May 20, 2013.

[15] Executive Office of the President, Statement of Administration Policy, "H.R. 1911—Smarter Solutions for Students Act," May 22, 2013.

[16] Congressional Budget Office, Cost Estimate, "S. 953, Student Loan Affordability Act," May 23, 2013.

[17] S. 1003 is substantially similar to S. 682, which was previously introduced in the 113th Congress.

to June 1, plus 3.0 percentage points. There would be no differentiation by loan type. Also, under S. 1003, there would be no cap on the maximum interest rate a borrower could be charged. Under this policy option, borrowers who obtain multiple loans over a period of successive years would typically have different fixed interest rates on loans made during different award years.

S. 1003 would not amend the current formula for determining the interest rate on Consolidation Loans. Under current law, the interest rate on Direct Consolidation loans is determined by taking the weighted average of the interest rates on the loans being consolidated and rounding the rate up to the nearest higher one-eighth of 1%. Currently, there is a cap of 8.25% on the interest rate for Direct Consolidation Loans. It appears that S. 1003 would not prohibit borrowers who have federal student loans with interest rates higher than 8.25% from lowering their rate to 8.25% by consolidating their loans into a Direct Consolidation Loan.

CBO has published a cost estimate for S. 682, but not S. 1003. CBO estimates that the enactment of S. 682 would *increase* direct spending by $25.8 billion over the period of FY2013-FY2018; but that over the period of FY2013-FY2023, it would *reduce* direct spending by $15.6 billion.[18]

S. 897, the Bank on Students Loan Fairness Act

S. 897 would authorize a new source of funding for purposes of making Direct Subsidized Loans; and would establish a new fixed interest rate structure for Direct Subsidized Loans made during AY2013-2014 only. The Board of Governors of the Federal Reserve System would be required to transfer funds from the combined earnings of the Federal Reserve System to the Secretary of Education for purposes of making Direct Subsidized Loans during AY2013-2014.[19] The applicable interest rate on Direct Subsidized Loans made during AY2013-2014 would be the Federal Reserve discount window primary credit rate charged by Federal Reserve Banks on July 1, 2013.[20] This interest rate would remain in effect on Direct Subsidized Loans made during AY2013-2014 until the loans are paid in full.

S. 897 would not affect the source of funding for, nor the interest rates applicable to other DL program loans. Thus, under S. 897, the rate on Direct Subsidized Loans made during AY2014-2015 and future years would remain 6.8%, the rate on Direct Unsubsidized Loans made during AY2013-2014 and future years would remain 6.8%, and the rate on Direct PLUS Loans made during AY2013-2014 and future years would remain 7.9%. S. 897 would not amend the current formula for determining the interest rate on Direct Consolidation Loans.

CBO has not released a cost estimate for S. 897.

Senate Amendment to H.R. 1911, the Bipartisan Student Loan Certainty Act of 2013

The Senate amendment to H.R. 1911 would establish a market-indexed, fixed interest rate structure for Direct Subsidized Loans, Direct Unsubsidized Loans, and Direct PLUS Loans made during AY2013-2014 and future years. Under the Senate amendment to H.R. 1911, the interest

[18] Congressional Budget Office, Cost Estimate, "S. 682, Comprehensive Student Loan Protection Act," May 23, 2013.

[19] For additional information on the Federal Reserve as a potential source of funding for Direct Loans, see Congressional Budget Office, The Budgetary Status of the Federal Reserve System, Feb. 1985.

[20] The discount window primary credit rate is a pecuniary rate. It is set by the Federal Reserve Banks at a rate higher than the federal funds target rate to discourage banks from borrowing through the discount window. For additional information on the Federal Reserve discount window primary credit rate, see CRS Report RS21986, *Federal Reserve: Lender of Last Resort Functions*, by Marc Labonte.

rate in effect for the award year during which the loan is made would remain the same from the time the loan is disbursed until it is paid in full. On an annual basis, a new fixed interest rate would be established for loans to be made during the upcoming award year. The interest rate would be indexed to the rate on the 10-year Treasury note as of the last auction held prior to June 1 and would be increased by a margin, or interest rate add-on, that would differ by loan type and borrower academic level.

Under the Senate amendment to H.R. 1911, the interest rate on Direct Subsidized Loans and Direct Unsubsidized Loans to undergraduate students would be the 10-year Treasury note rate, plus 2.05 percentage points, with a cap of 8.25%; the interest rate on Direct Unsubsidized Loans to graduate and professional students would be the 10-year Treasury note rate, plus 3.60 percentage points, with a cap of 9.50%; and the interest rate on Direct PLUS Loans to graduate and professional students, and to parent borrowers, would be the 10-year Treasury note rate, plus 4.60 percentage points, with a cap of 10.50%. Under the proposal, individuals who borrow loans over a period of successive years would likely have different fixed interest rates on each of their loans.

The Senate amendment to H.R. 1911 would remove the interest rate cap on Direct Consolidation Loans. Thus, the interest rate on Direct Consolidation loans would be determined by taking the weighted average of the interest rates on the loans being consolidated and rounding the rate up to the nearest higher one-eighth of 1%.

The Senate amendment to H.R. 1911 would also require the Government Accountability Office (GAO) to conduct a study on the actual cost of administering the federal student loan programs.

CBO estimates that the enactment of the Senate amendment to H.R. 1911 would *increase* direct spending by $25.0 billion over the period of FY2013-FY2018; but that over the period of FY2013-FY2023, it would *reduce* direct spending by $0.7 billion.[21]

On July 24, 2013, the Senate amended and passed H.R. 1911 by a vote of 81 to 18.

Side-by-Side Comparison of Student Loan Interest Rate Policy Options

A side-by-side comparison of the student loan interest rate policy options described above is presented below in **Table 2**.

[21] Congressional Budget Office, Cost Estimate, "Bipartisan Student Loan Certainty Act of 2013," July 22, 2013.

Table 2. Side-by-Side Comparison of Student Loan Interest Rate Policy Options

Current Law and Selected Proposals in the 113th Congress

	Current Law	FY2014 Budget	H.R. 1911	S. 953	S. 1003	S. 897	S.A. to H.R. 1911
Duration of change	N/A	Permanent	Permanent	2-years (Subsidized only)	Permanent	1-year (Subsidized only)	Permanent
Subsidized Loans to Undergraduate Students							
Rate structure	Statutory fixed rate	Market-indexed fixed rate	Market-indexed variable rate	Statutory fixed rate	Market-indexed fixed rate	Market-indexed fixed rate (AY2013-2014); statutory fixed rate thereafter	Market-indexed fixed rate
Index	N/A	10-year Treasury note	10-year Treasury note	N/A	10-year Treasury note	Discount window primary credit rate	10-year Treasury note
Rate or formula	6.80%	Index, plus add-on; no cap	Index, plus add-on; with a cap	3.40% (AY2013-2014 & AY2014-2015); 6.8% thereafter	Index, plus add-on, no cap	Index, no add-on, no cap (AY2013-2014); 6.8% thereafter	Index, plus add-on; with a cap
Add-on	N/A	0.93%	2.50%	N/A	3.00%	N/A	2.05%
Maximum rate	6.80%	N/A[a]	8.50%	3.40% (AY2013-2014 & AY2014-2015); 6.8% thereafter	N/A	N/A (AY2013-2014); 6.8% thereafter	8.25%
Unsubsidized Loans to Undergraduate Students							
Loan Type	Statutory fixed rate	Market-indexed fixed rate	Market-indexed variable rate	Statutory fixed rate	Market-indexed fixed rate	Statutory fixed rate	Market-indexed fixed rate
Index	N/A	10-year Treasury note	10-year Treasury note	N/A	10-year Treasury note	N/A	10-year Treasury note
Rate or formula	6.80%	Index, plus add-on, no cap	Index, plus add-on; with a cap	6.80%	Index, plus add-on, no cap	6.80%	Index, plus add-on; with a cap
Add-on	N/A	2.93%	2.50%	N/A	3.00%	N/A	2.05%

	Current Law	FY2014 Budget	H.R. 1911	S. 953	S. 1003	S. 897	S.A. to H.R. 1911
Maximum rate	6.80%	N/A[a]	8.50%	6.80%	N/A	6.80%	8.25%
Unsubsidized Loans to Graduate Students							
Loan Type	Statutory fixed rate	Market-indexed fixed rate	Market-indexed variable rate	Statutory fixed rate	Market-indexed fixed rate	Statutory fixed rate	Market-indexed fixed rate
Index	N/A	10-year Treasury note	10-year Treasury note	N/A	10-year Treasury note	N/A	10-year Treasury note
Rate or formula	6.80%	Index, plus add-on, no cap	Index, plus add-on; with a cap	6.80%	Index, plus add-on, no cap	6.80%	Index, plus add-on; with a cap
Add-on	N/A	2.93%	2.50%	N/A	3.00%	N/A	3.60%
Maximum rate	6.80%	N/A[a]	8.50%	6.80%	N/A	6.80%	9.50%
PLUS							
Loan Type	Statutory fixed rate	Market-indexed fixed rate	Market-indexed variable rate	Statutory fixed rate	Market-indexed fixed rate	Statutory fixed rate	Market-indexed fixed rate
Index	N/A	10-year Treasury note	10-year Treasury note	N/A	10-year Treasury note	N/A	10-year Treasury note
Rate or formula	7.90%	Index, plus add-on, no cap	Index, plus add-on; with a cap	7.90%	Index, plus add-on, no cap	7.90%	Index, plus add-on; with a cap
Add-on	N/A	3.93%	4.50%	N/A	3.00%	N/A	4.60%
Maximum rate	7.90%	N/A[a]	10.50%	7.90%	N/A	7.90%	10.50%
Consolidation							
Loan Type	Statutory fixed rate	Statutory fixed rate	Statutory fixed rate	Statutory fixed rate	Statutory fixed rate	Statutory fixed rate	Statutory fixed rate
Index	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rate or formula	Weighted interest rate of loans being consolidated, rounded up to next higher 1/8th of 1%; with a cap	Weighted interest rate of loans being consolidated, rounded up to next higher 1/8th of 1%; no cap	Weighted interest rate of loans being consolidated, rounded up to next higher 1/8th of 1%; no cap	Weighted interest rate of loans being consolidated, rounded up to next higher 1/8th of 1%; with a cap	Weighted interest rate of loans being consolidated, rounded up to next higher 1/8th of 1%; with a cap	Weighted interest rate of loans being consolidated, rounded up to next higher 1/8th of 1%; with a cap	Weighted interest rate of loans being consolidated, rounded up to next higher 1/8th of 1%; no cap

	Current Law	FY2014 Budget	H.R. 1911	S. 953	S. 1003	S. 897	S.A. to H.R. 1911
Add-on	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum rate	8.25%	N/A[a]	N/A	8.25%	8.25%	8.25%	N/A
CBO Score[b]							
2013-2018	N/A	$29.8 billion	($1 billion)	$8.3 billion	$25.9 billion[c]	Not available	$25.0 billion
2013-2023	N/A	($6.7 billion)	($3.7 billion)	$8.3 billion	($15.6 billion)[c]	Not available	($0.7 billion)

Sources: HEA, Section 455; U.S. Department of Education, FY2014 Department of Education Justifications of Appropriation Estimates to the Congress, Volume II, Student Loans Overview, p. S-13; H.R. 1911; S. 953; S. 1003; S. 897; S.A. to H.R. 1911; and applicable CBO cost estimates.

Notes:

a. The President's FY2014 budget student loan interest rate proposal does not include an interest rate cap. However, the proposal is made in conjunction with a proposal to expand the availability of the PAYE repayment plan, which would have the effect of limiting the maximum monthly payment of eligible borrowers.

b. Figures presented here show only CBO's estimates for changes in direct spending that would result from the respective student loan interest rate proposal. Estimates for total changes in direct spending that would result from a comprehensive legislative proposal may be obtained from the respective CBO cost estimate.

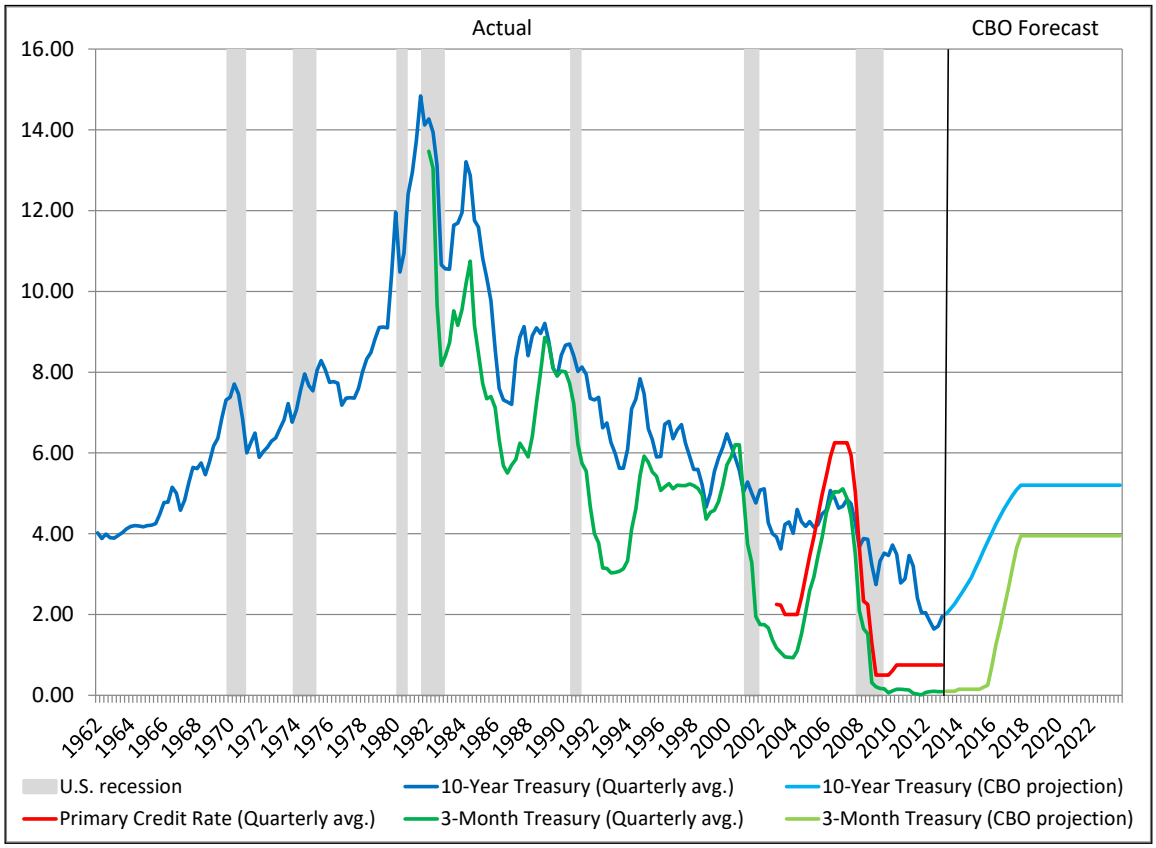
c. From CBO cost estimate for S. 682.

Potential Market Indices for Student Loan Interest Rate Policy Options

Several of the proposals introduced in the 113th Congress would index borrower interest rates to market rates. The President's FY2014 budget proposal, H.R. 1911, S. 1003, and the Senate amendment to H.R. 1911 each would use the rate on 10-year Treasury notes as an index for Direct Loans made during AY2013-2014 and future years. In contrast, S. 897 would set the borrower rate for Direct Subsidized Loans made during AY2013-2014 only at the rate of the Federal Reserve discount window primary credit rate. Prior cohorts of FFEL and Direct Loans that were made from 1992 through 2006 have variable interest rates that are indexed to 91-day (3-month) Treasury bills. This index is provided for comparison purposes. Historical and projected rates for these three indices are presented below in **Figure 1**.

Figure 1. 10-Year Treasury, 3-Month Treasury, and Primary Credit Rates

Actual and CBO Forecast



Sources: Federal Reserve Bank of St. Louis, Federal Reserve Economic Data, 10-year Treasury Constant Maturity Rate (Quarterly avg.), 3-month Treasury Constant Maturity Rate (Quarterly avg.), Primary Credit Rate (Quarterly avg.); and Congressional Budget Office, Congressional Budget Office (CBO), The Budget and Economic Outlook: Fiscal Years 2013 to 2023, "Baseline Economic Forecast—February 2013 Projections", Table 1. February 2013 Baseline Forecast—Data Release (Quarterly), Feb. 5, 2013. (Hereafter referred to as "CBO, February 2013 Baseline Forecast.")

Note: Projections are not available for the primary credit rate.

Figure 1 shows historical quarterly averages of the constant maturity rates for 10-year Treasury notes since 1962 and 3-month Treasury bills since 1982. It also shows quarterly averages of the

Federal Reserve discount window primary credit rate since its introduction in 2003. In addition, the figure shows CBO's quarterly projections of rates for 10-year Treasury notes and 3-Month Treasury bills through 2023.

As noted above, several of the policy options under consideration would use the rate on 10-year Treasury notes as an index. **Figure 1** shows that there has been considerable fluctuation in the 10-year Treasury note rate over the years. For nearly the entire period from 1963 through 2007, the quarterly average constant maturity rate on 10-year Treasury notes was above 4.0%; and for most of the period from 1969 through 1997, the rate was above 6.0%.

Figure 1 also shows that there has been considerably less fluctuation or variability in rates on 10-year Treasury notes than there has been on 3-month Treasury bills. The figure also shows the extent to which Federal Reserve policy makers have raised and lowered the primary credit rate in response to monetary policy objectives.

Actual future rates on Treasury securities will likely differ from the projected rates shown here. Interest rate projections provide a sense of the direction in which rates may be expected to move and the magnitude of such movement. Interest rate projections, however, contain some degree of imprecision. Based on CBO's analysis of its own forecast record, it finds that as measured by the mean absolute error, the average difference between its two-year forecasts of rates on 10-year Treasury Notes and actual outcomes over the period from 1984 to 2010 was 0.6 percentage points.[22] It is reasonable to assume that projections that extend beyond two years out may be less precise.

Some of the interest rate proposals described above would use the rate at the last auction held prior to June 1 as the basis for setting borrower interest rates for the following award year. Since rates vary with the market on tradable securities, the rate at which a particular security is auctioned may differ from the rate at which the security is traded at a later date. Also, 10-year notes are typically auctioned about once per quarter, but between ends of quarters. However, the Treasury determines which type of security to auction and at what date to hold an auction in response to the financing needs of the federal government. Thus, the last auction held prior to June 1 may be several months prior to that date and the auction rate may be substantially different than the rate at which Treasury securities are trading on June 1. **Table 3** presents a history of 10-year Treasury note high yield rates at the last auction held prior to June 1 for each year for which such data are available from the U.S. Treasury.

Table 3. 10-year Treasury Note High Yield

Last Auction Prior to June 1: 1995 through 2013

Auction Date	High Yield
May 10, 1995	6.68
May 8, 1996	6.906
May 7, 1997	6.759
May 13, 1998	5.653
May 12, 1999	5.51
February 9, 2000	6.54
February 7, 2001	5.067

[22] Congressional Budget Office, CBO's Economic Forecasting Record: 2013 Update, Jan. 2013.

Auction Date	High Yield
February 6, 2002	4.88
May 8, 2003	3.7
May 13, 2004	4.848
May 12, 2005	4.22
May 11, 2006	5.14
May 8, 2007	4.612
May 7, 2008	3.937
May 6, 2009	3.19
May 12, 2010	3.548
May 11, 2011	3.21
May 9, 2012	1.855
May 8, 2013	1.81

Source: U.S. Department of the Treasury, Bureau of the Public Debt, TreasuryDirect, "Announcements, Data & Results".

Notes: According to the U.S. Department of the Treasury, TreasuryDirect Glossary of Terms, in a price-based auction, the high yield is the yield associated with the lowest price accepted.

Analysis of Interest Rate Policy Options

This part of the report presents analysis of several of the student loan interest rate policy options that have been proposed in the 113th Congress; and how they compare with current law. It begins with a review of the interest rate structure applicable to Direct Loans made under current law and is followed with similar information for the policy options presented in the President's FY2014 budget, H.R. 1911, S. 953, S. 1003, S. 897, and the Senate amendment to H.R. 1911.

For current law and for each policy option, a similar format is followed. First, a summary table presents information showing the interest rate formula applicable to each loan type. This describes whether the interest rate is fixed or variable; and if market-indexed, the index that is used, the applicable add-on, and whether a cap on maximum interest rate applies.

Next, a group of three figures show projected interest rates for Direct Subsidized Loans, Direct Unsubsidized Loans, and Direct PLUS Loans made during the next six award years (AY2013-2014 through AY2018-2019). Projected rates are shown for each one-year period beginning July 1 for 2013 through 2027. The figures are designed to show the general pattern of interest rates that might be expected under the various policy options. For instance, would interest rates on all of a borrower's loans remain constant from the time the loans are made until they are paid in full? Would there be the possibility that a borrower who has several loans might have a different interest rate for each of the loans? Or, might a borrower face the possibility that the interest rates on all his or her loans could increase or decrease from year to year? A six-year period was chosen to provide an illustration of the variability associated with rate projections for potential indices. That is, CBO projections for financial instruments are based upon a mix of current and historical economic data in the initial years, but for later years (i.e., year 6 and beyond) are largely based on historical data and the 6-10 year projection is held constant (i.e., it is the same number for each year). In the analysis presented here, market-indexed rates based upon CBO's projection of 10-year Treasury notes for years 6-10 is only shown once—for loans made during AY2018-2019. If

we were to show projected market-indexed rates for subsequent years, the projected rates would be the same as for AY2018-2019.

After the figures displaying projected interest rate, a table is then presented which shows the results of a series of case simulations which are designed to provide an indication of the interest expenses three different types of borrowers might expect to pay on Direct Loans borrowed to finance a four year period of undergraduate education. Simulation results are presented for undergraduate dependent student borrowers, undergraduate independent student borrowers, and borrowers who are parents of undergraduate dependent students.[23] Since the results of the case simulations for policy options that are indexed to market rates are highly sensitive to projected future interest rates, two distinct four-year periods of borrowing are examined. The first is for a four-year period of undergraduate education beginning next fall: AY2013-2014 through AY2016-2017. The second is for the subsequent four-year period, assuming period of undergraduate education beginning four years from now: AY2017-2018 through AY2020-2021.

The second scenario (AY2017-2018 through AY2020-2021) is considered because two of the prominent proposals call for market-indexed fixed rates, which would not be simulated effectively through the first scenario alone. By adding a second scenario, we present more complete information on the range of outcomes that might be associated with this type of rate-setting structure.

As noted earlier, these case simulations are based on projected future interest rates, with rates for the final year of the projection held constant for future years. As it is likely that future rates will differ from those projected, the simulation results presented here for market-indexed loans may be best viewed as indicating a general sense of the direction in which a rate will move and the magnitude of such movement. Simulations based on market-indexed rates are less precise than those based on known fixed rates. Nonetheless, it is intended that this attempt to examine the known and projected rates over common future periods, mapped against actual information about loan balances and amortization periods, as well as loan terms and conditions, provides a relative sense of the potential effects of various interest rate structures on borrowers.

Additional information on how the three borrower cases were constructed and on the assumptions made in analyzing the various interest rate policy options is presented in **Appendix A**.

Current Law

Table 4. Current Law: Summary

Statutorily Specified Fixed Rate

Loan Type	Interest Rate Formula
Direct Subsidized Loan: undergraduate	6.8%
Direct Unsubsidized Loan: undergraduate	6.8%
Direct Unsubsidized Loan: graduate and professional	6.8%
PLUS Loan: graduate and professional	7.9%
PLUS Loan: parent	7.9%

[23] Under the HEA, different federal student aid award rules apply depending on whether a student is determined to be dependent on or independent of his or her parents' financial support. Among other things, higher annual borrowing limits are available to independent students.

Loan Type	Interest Rate Formula
Consolidation Loan: all borrower types	Weighted rate of loans being consolidated, rounded up to the next higher 1/8th of 1%; capped at 8.25%

Source: HEA, Section 455.

Figure 2. Current Law: Subsidized Loans

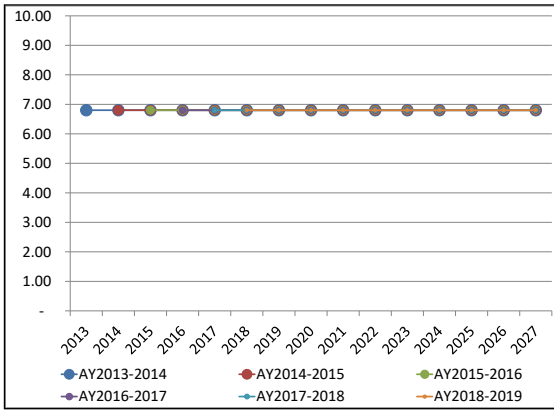


Figure 3. Current Law: Unsubsidized Loans

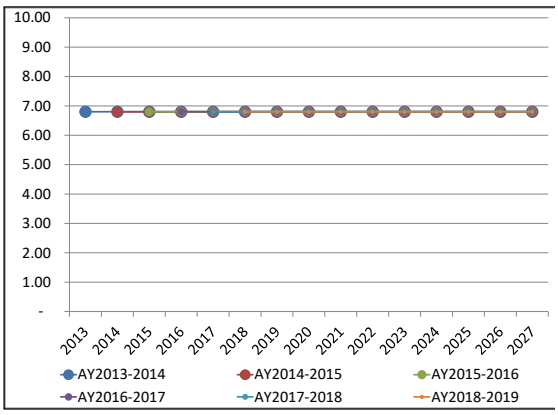
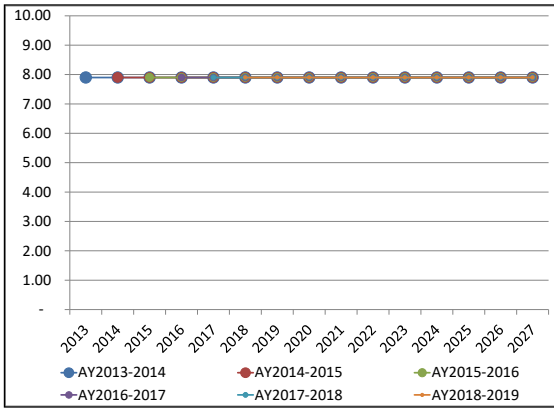


Figure 4. Current Law: PLUS Loans



Sources: HEA, Section 455.

Notes: Interest rates that are in effect at the time a loan is made will remain in effect until the loan is paid in full.

Table 5. Current Law: Interest Rates and Borrower Expenses

Case Simulations for Average Amounts Borrowed over Four Years

	Dependent	Independent	Parent
Four years of borrowing: AY2013-2014 through AY2016-2017			
Interest rate	6.8%	6.8%	7.9%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,593	23,994	52,484
Interest paid	7,804	10,953	32,434
Total principal & interest paid	24,295	33,135	76,080
Monthly payment	202	276	634
Four years of borrowing: AY2017-2018 through AY2020-2021			
Interest rate	6.8%	6.8%	7.9%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,593	23,994	52,484
Interest paid	7,804	10,953	32,434
Total principal & interest paid	24,295	33,135	76,080
Monthly payment	202	276	634

Source: CRS analysis.

Note: See **Appendix A**.

Undergraduate Dependent Borrower

Under current law, an undergraduate dependent student who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $16,491 in combined Direct Subsidized Loans and Direct Unsubsidized Loans would pay an estimated total of $7,804 in interest expenses. The estimated monthly payment would be $202. Since under current law, future loans would be made at the same current interest rates, if a similar student borrowed the same amount during a subsequent four-year period, it is estimated that the borrower would pay the same amount in interest and that the monthly payment would be the same.

Parent PLUS Borrower

Under current law, a parent borrower who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $43,646 in combined Direct PLUS Loans would pay an estimated total of $32,434 in interest expenses. The estimated monthly payment would be $634. Since under current law, future loans would be made at the same current interest rates, if a parent borrowed the same amount during a subsequent four-year period, it is estimated that the parent borrower would pay the same amount in interest and that the monthly payment would be the same.

President's FY2014 Budget Proposal

Table 6. President's FY2014 Budget Proposal: Summary

Market-Indexed Fixed Rate, No Cap

Loan Type	Interest Rate Formula
Direct Subsidized Loan: undergraduate	10-year Treasury note, plus 0.93%; no cap
Direct Unsubsidized Loan: undergraduate	10-year Treasury note, plus 2.93%; no cap
Direct Unsubsidized Loan: graduate and professional	10-year Treasury note, plus 2.93%; no cap
PLUS Loan: graduate and professional	10-year Treasury note, plus 2.93%; no cap
PLUS Loan: parent	10-year Treasury note, plus 2.93%; no cap
Consolidation Loan: all borrower types	Weighted rate of loans consolidated, rounded up to next higher 1/8th of 1%; no cap

Source: ED, FY2014 Budget Justifications, "Student Loans Overview", p. S-13.

Figure 5. FY2014 Budget: Subsidized Loans

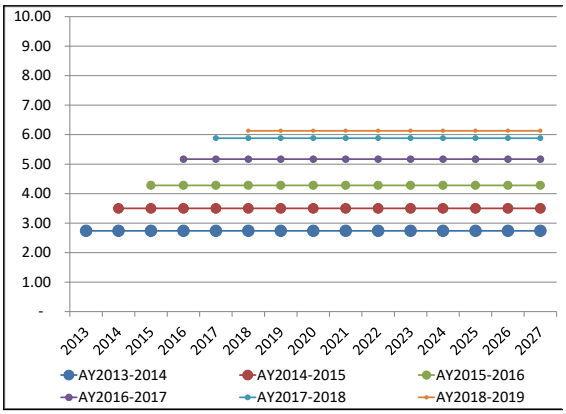


Figure 6. FY2014 Budget: Unsubsidized Loans

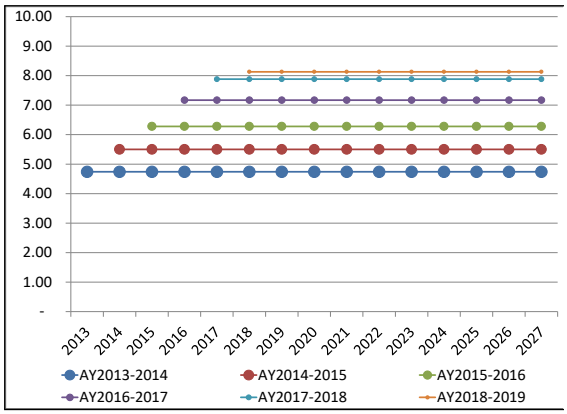
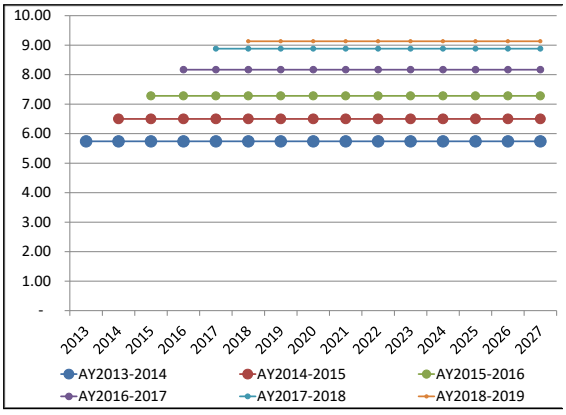


Figure 7. FY2014 Budget: PLUS Loans



Sources: ED, FY2014 Department of Education Justifications of Appropriation Estimates to the Congress, Volume II, Student Loans Overview, p. S-13; and CBO, February 2013 Baseline Forecast.

Notes: Interest rates that are in effect at the time a loan is made would remain in effect until the loan is paid in full.

Table 7. President's FY2014 Budget: Interest Rates and Borrower Expenses

Case Simulations for Average Amounts Borrowed over Four Years

	Dependent	Independent	Parent
Four years of borrowing: AY2013-2014 through AY2016-2017			
Interest rate (est. range)	2.74% to 7.17%	2.74% to 7.17%	5.74% to 8.17%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,363	23,629	50,974
Interest paid	5,446	7,826	27,083
Total principal & interest paid	21,937	30,008	70,729
Monthly payment	183	250	589
Four years of borrowing: AY2017-2018 through AY2020-2021			
Interest rate (est. range)	5.17% to 8.13%	5.17% to 8.13%	8.17% to 9.13%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,709	24,200	53,366
Interest paid	7,833	11,300	36,839
Total principal & interest paid	24,324	33,482	80,485
Monthly payment	203	279	671

Source: CRS analysis.

Note: See **Appendix A**.

Undergraduate Dependent Borrower

Under the President's FY2014 budget proposal, an undergraduate dependent student who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $16,491 in combined Direct Subsidized Loans and Direct Unsubsidized Loans would pay an estimated total of $5,446 in interest expenses. The estimated monthly payment would be $183, or approximately $19 less than under current law. Since under the President's proposal, borrower interest rates would be indexed to market rates at the time a loan is made, future loans would likely be made with different interest rates. Based on projected future rates, if a similar student borrowed the same amount during the four-year period from AY2017-2018 through AY2020-2021, it is estimated that the borrower would pay $7,833 in interest expenses and that the borrower's monthly payment would be $203, or approximately $1 more than under current law.

Parent PLUS Borrower

Under the President's proposal, a parent borrower who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $43,646 in Direct PLUS Loans would pay an estimated total of $27,083 in interest expenses. The estimated monthly payment would be $589, or approximately $45 less than under current law. If a parent borrowed the same amount during the four-year period from AY2017-2018 through AY2020-2021, based on currently projected rates, it is estimated that the borrower would pay $36,839 in interest expenses and that the monthly payment would be $671, or approximately $37 more than under current law.

H.R. 1911, the Smarter Solutions for Students Act

Table 8. H.R. 1911: Summary

Market-Indexed Variable Rate, With a Cap; Fixed Rate Consolidation Option

Loan Type	Interest Rate Formula
Direct Subsidized Loan: undergraduate	10-year Treasury note, plus 2.5%; 8.5% cap
Direct Unsubsidized Loan: undergraduate	10-year Treasury note, plus 2.5%; 8.5% cap
Direct Unsubsidized Loan: graduate and professional	10-year Treasury note, plus 2.5%; 8.5% cap
PLUS Loan: graduate and professional	10-year Treasury note, plus 4.5%; 10.5% cap
PLUS Loan: parent	10-year Treasury note, plus 4.5%; 10.5% cap
Consolidation Loan: all borrower types	Weighted rate of loans being consolidated, rounded up to the next higher 1/8th of 1%; no cap

Source: H.R. 1911.

Figure 8. H.R. 1911: Subsidized Loans

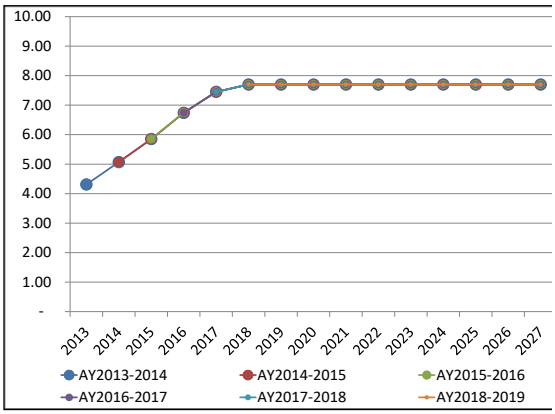


Figure 9. H.R. 1911: Unsubsidized Loans

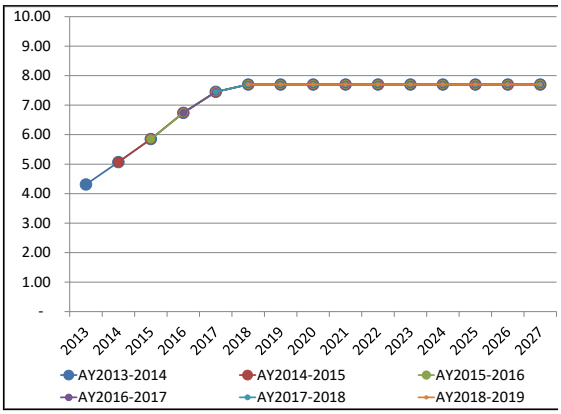
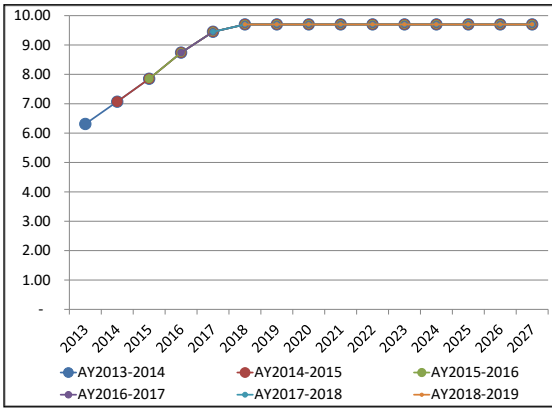


Figure 10. H.R. 1911: PLUS Loans



Sources: H.R. 1911; and CBO, February 2013 Baseline Forecast.

Notes: Interest rates would adjust once per year on July 1, based on changes in rate on 10-year Treasury notes. CBO's 2nd quarter 10-year Treasury Note projections have been used as point estimates of future rates. However, the presence of an interest rate cap may alter the expected probability of a borrower facing any possible future interest rate, as the cap would prevent the borrower from facing interest rates above the cap. The use of probabilistic modeling, such as the modeling that may be used by CBO and OMB in preparing cost estimates, may result in lower projected future borrower interest rates when a cap applies. Probabilistic modeling has not been employed in this analysis.

Table 9. H.R. 1911: Interest Rates and Borrower Expenses

Case Simulations for Average Amounts Borrowed over Four Years

	Dependent	Independent	Parent
Four years of borrowing: AY2013-2014 through AY2016-2017			
Interest rate (est. range)	4.31% to 7.70%	4.31% to 7.70%	6.31% to 9.70%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,511	23,853	52,829
Interest paid	8,647	12,060	39,342
Total principal & interest paid	25,138	34,242	82,988
Monthly payment (est. range)	207 to 210	283 to 286	682 to 689
Four years of borrowing: AY2017-2018 through AY2020-2021			
Interest rate (est. range)	7.45% to 7.70%	7.45% to 7.70%	9.45% to 9.70%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,737	24,230	54,480
Interest paid	8,996	12,636	42,014
Total principal & interest paid	25,487	34,818	85,660
Monthly payment	212	290	711

Source: CRS analysis.

Note: See **Appendix A**.

Undergraduate Dependent Borrower

Under H.R. 1911, an undergraduate dependent student who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $16,491 in combined Direct Subsidized Loans and Direct Unsubsidized Loans would pay an estimated total of $8,647 in interest expenses. As the interest rate would adjust annually, the estimated monthly payment would vary from $207 to $210, or approximately $5 to $8 more than under current law. Based on projected future interest rates (which do not vary during this period), if a similar student borrowed the same amount during the four-year period from AY2017-2018 through AY2020-2021, it is estimated that under H.R. 1911, the borrower would pay $8,996 in interest expenses and that the borrower's monthly payment would be $212, or approximately $10 more than under current law.

Parent PLUS Borrower

Under H.R. 1911, a parent borrower who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $43,646 in combined Direct PLUS Loans would pay an estimated total of $39,342 in interest expenses. The estimated monthly payment would from $682 to $689, or approximately $48 to $55 more than under current law. If a parent borrowed the same amount during the four-year period from AY2017-2018 through AY2020-2021, based on currently projected rates (which do not vary during this period), it is estimated that the borrower would pay $42,014 in interest expenses and that the borrower's monthly payment would be $711, or approximately $77 more than under current law.

S. 953, the Student Loan Affordability Act

Table 10. S. 953: Summary

Statutorily Specified Fixed Rate; Two-year Rate Reduction for Direct Subsidized Loans

Loan Type	Interest Rate Formula
Direct Subsidized Loan: undergraduate	3.4% (AY2013-2014 & AY2014-2015); 6.8% thereafter
Direct Unsubsidized Loan: undergraduate	6.8%
Direct Unsubsidized Loan: graduate and professional	6.8%
PLUS Loan: graduate and professional	7.9%
PLUS Loan: parent	7.9%
Consolidation Loan: all borrower types	Weighted rate of loans consolidated, rounded up to next higher 1/8th of 1%; 8.25% cap

Source: HEA, Section 455; and S. 953.

Figure 11. S. 953: Subsidized Loans

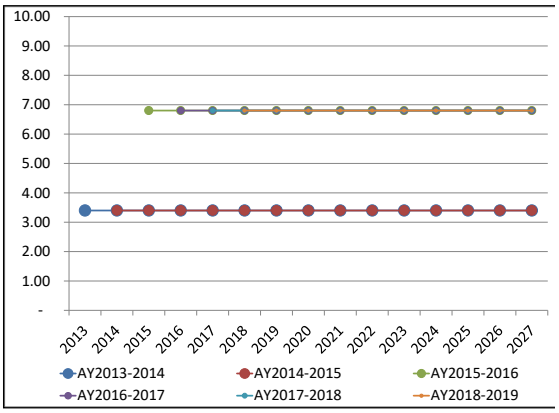


Figure 12. S. 953: Unsubsidized Loans

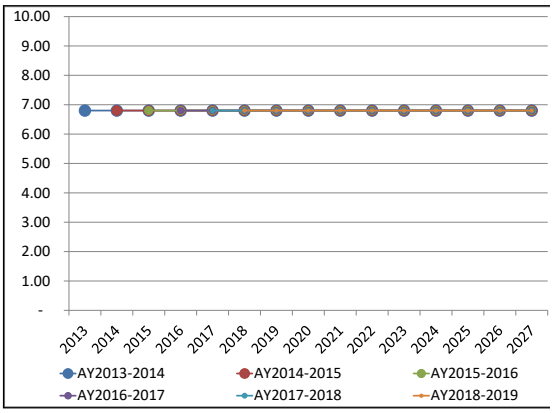
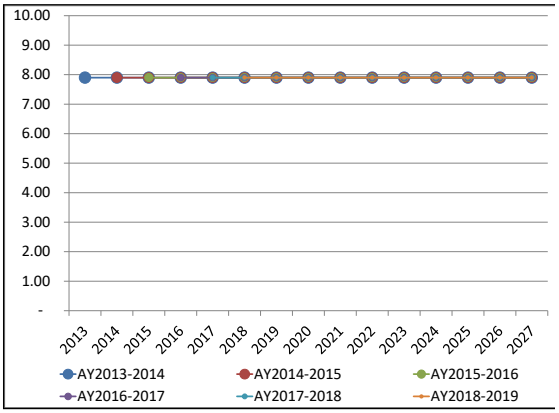


Figure 13. S. 953: PLUS Loans



Sources: HEA, Section 455; and S. 953.

Notes: Interest rates that are in effect at the time a loan is made would remain in effect until the loan is paid in full.

Table 11. S. 953: Interest Rates and Borrower Expenses

Case Simulations for Average Amounts Borrowed over Four Years

	Dependent	Independent	Parent
Four years of borrowing: AY2013-2014 through AY2016-2017			
Interest rate (est. range)	3.4% to 6.8%	3.4% to 6.8%	7.9%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,556	23,949	52,484
Interest paid	6,850	9,746	32,434
Total principal & interest paid	23,341	31,928	76,080
Monthly payment	195	266	634
Four years of borrowing: AY2017-2018 through AY2020-2021			
Interest rate	6.8%	6.8%	7.9%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,593	23,994	52,484
Interest paid	7,804	10,953	32,434
Total principal & interest paid	24,295	33,135	76,080
Monthly payment	202	276	634

Source: CRS analysis.

Note: See **Appendix A**.

Undergraduate Dependent Borrower

Under S. 953, an undergraduate dependent student who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $16,491 in combined Direct Subsidized Loans and Direct Unsubsidized Loans would pay an estimated total of $6,850 in interest expenses. As the interest rate would adjust annually, the estimated monthly payment would be $195, or approximately $7 less than under current law. Since S. 953 would not affect the interest rate structure of loans made during AY2015-2016 and future years, if a similar student borrowed the same amount during the four-year period from AY2017-2018 through AY2020-2021, it is estimated that under S. 953, the borrower would pay $7,804 in interest expenses and that the borrower's monthly payment would be $202, the same as under current law.

Parent PLUS Borrower

S. 953 would not affect the interest rate structure for Direct PLUS Loans. Thus, borrowers of Direct PLUS Loans would pay the same amount under S. 953 as under current law.

S. 1003, the Comprehensive Student Loan Protection Act

Table 12. S. 1003: Summary

Market-Indexed Fixed Rate, No Cap; Fixed Rate Consolidation Option With a Cap

Loan Type	Interest Rate Formula
Direct Subsidized Loan: undergraduate	10-year Treasury note, plus 3.0%; no cap
Direct Unsubsidized Loan: undergraduate	10-year Treasury note, plus 3.0%; no cap
Direct Unsubsidized Loan: graduate and professional	10-year Treasury note, plus 3.0%; no cap
PLUS Loan: graduate and professional	10-year Treasury note, plus 3.0%; no cap
PLUS Loan: parent	10-year Treasury note, plus 3.0%; no cap
Consolidation Loan: all borrower types	Weighted rate of loans consolidated, rounded up to next higher 1/8th of 1%; 8.25% cap

Source: HEA, Section 455; S. 1003.

Figure 14. S. 1003: Subsidized Loans

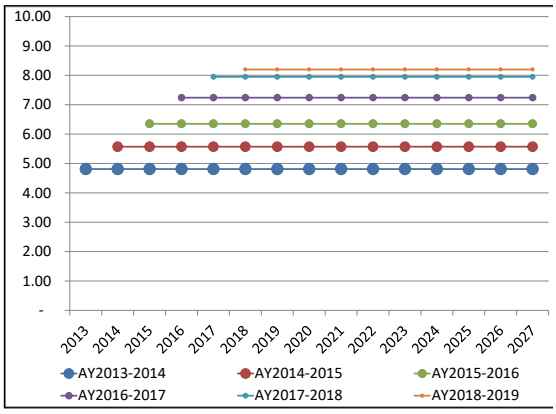


Figure 15. S. 1003: Unsubsidized Loans

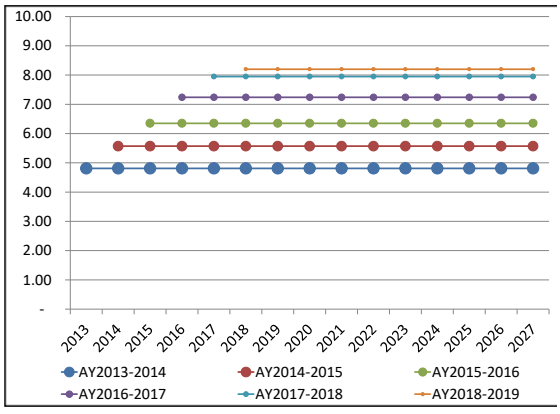
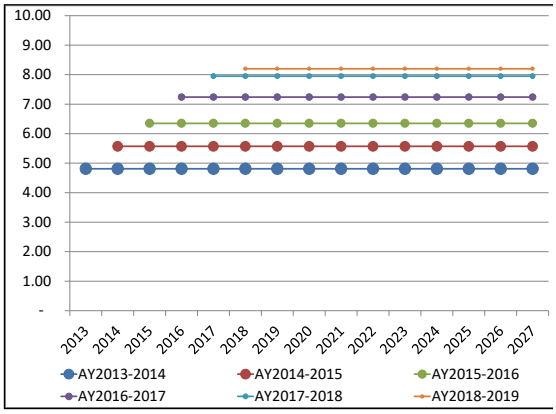


Figure 16. S. 1003: PLUS Loans



Sources: HEA, Section 455; S. 1003; and CBO, February 2013 Baseline Forecast.

Notes: Interest rates that are in effect at the time a loan is made will remain in effect until the loan is paid in full.

Table 13. S. 1003: Interest Rates and Borrower Expenses

Case Simulations for Average Amounts Borrowed over Four Years

	Dependent	Independent	Parent
Four years of borrowing: AY2013-2014 through AY2016-2017			
Interest rate (est. range)	4.81% to 7.24%	4.81% to 7.24%	4.81% to 7.24%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,397	23,674	49,934
Interest paid	6,793	9,419	22,831
Total principal & interest paid	23,284	31,601	66,477
Monthly payment	194	263	554
Four years of borrowing: AY2017-2018 through AY2020-2021			
Interest rate (est. range)	7.95% to 8.20%	7.95% to 8.20%	7.95% to 8.20%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,803	24,341	52,713
Interest paid	9,588	13,474	33,552
Total principal & interest paid	26,079	35,656	77,198
Monthly payment	217	297	643

Source: CRS analysis.

Note: See **Appendix A**.

Undergraduate Dependent Borrower

Under S. 1003, an undergraduate dependent student who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $16,491 in combined Direct Subsidized Loans and Direct Unsubsidized Loans would pay an estimated total of $6,793 in interest expenses. The estimated monthly payment would be $194, or approximately $8 less than under current law. Under S. 1003, interest rates would be indexed to market rates at the time a loan is made and future loans would likely be made with different rates. Based on projected rates, if a similar student borrowed the same amount during the four-year period from AY2017-2018 through AY2020-2021, it is estimated that the borrower would pay $9,588 in interest expenses and the monthly payment would be $217, or approximately $15 more than under current law.

Parent PLUS borrower

Under S. 1003, a parent borrower who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $43,646 in combined Direct PLUS Loans would pay an estimated total of $22,831 in interest expenses. The estimated monthly payment would be $554, or approximately $80 less than under current law. If a parent borrowed the same amount during the four-year period from AY2017-2018 through AY2020-2021, based on currently projected rates, it is estimated that the borrower would pay $33,552 in interest expenses and that the monthly payment would be $643, or approximately $9 more than under current law.

S. 897, the Bank on Students Loan Fairness Act

Table 14. S. 897: Summary

Statutorily Specified Fixed Rate; One-year Alternative Index for Direct Subsidized Loans

Loan Type	Interest Rate Formula
Direct Subsidized Loan: undergraduate	Primary credit rate (AY2013-2014); 6.8% thereafter
Direct Unsubsidized Loan: undergraduate	6.8%
Direct Unsubsidized Loan: graduate and professional	6.8%
PLUS Loan: graduate and professional	7.9%
PLUS Loan: parent	7.9%
Consolidation Loan: all borrower types	Weighted rate of loans consolidated, rounded up to next higher 1/8th of 1%; 8.25% cap

Source: HEA, Section 455; and S. 897.

Figure 17. S. 897: Subsidized Loans

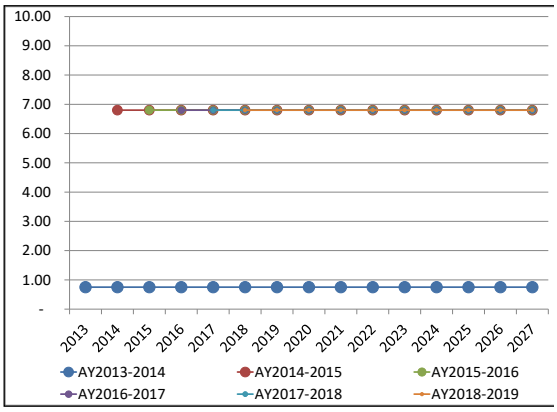


Figure 18. S. 897: Unsubsidized Loans

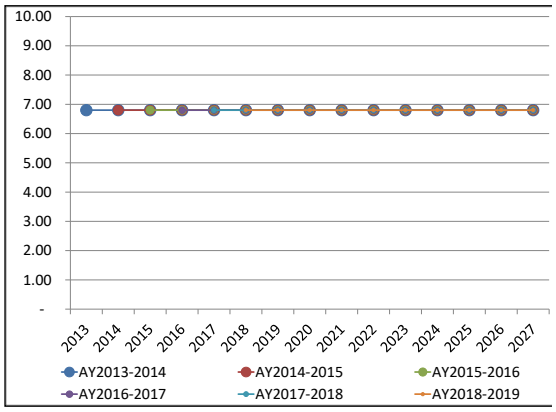
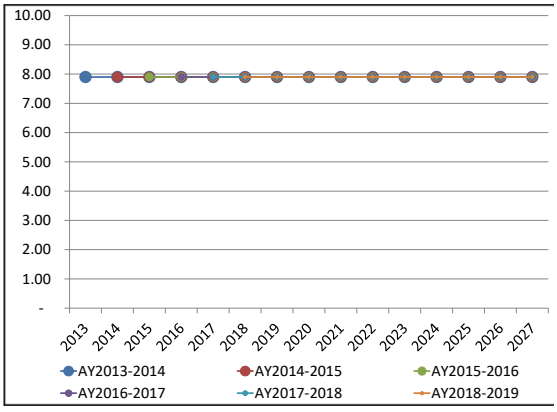


Figure 19. S. 897: PLUS Loans



Sources: HEA, Section 455; S. 897; and Board of Governors of the Federal Reserve System, Economic and Research Data, Selected Interest Rates (Weekly)—H.15, Release Date: July 8, 2013.

Notes: Interest rates that are in effect at the time a loan is made will remain in effect until the loan is paid in full.

Table 15. S. 897. Interest Rates and Borrower Expenses

Case Simulations for Average Amounts Borrowed over Four Years

	Dependent	Independent	Parent
Four years of borrowing: AY2013-2014 through AY2016-2017			
Interest rate (est. range)	0.75% to 6.8%	0.75% to 6.8%	7.9%
Cumulative borrowed	16,491	$22,182	43,646
Balance at start of repayment	17,526	$23,915	52,484
Interest paid	6,953	$9,938	32,434
Total principal & interest paid	23,444	$32,120	76,080
Monthly payment	195	$268	634
Four years of borrowing: AY2017-2018 through AY2020-2021			
Interest rate	6.8%	6.8%	7.9%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,593	23,994	52,484
Interest paid	7,804	10,953	32,434
Total principal & interest paid	24,295	33,135	76,080
Monthly payment	202	276	634

Source: CRS analysis.

Note: See **Appendix A**.

Undergraduate Dependent Borrower

Under S. 897, an undergraduate dependent student who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $16,491 in combined Direct Subsidized Loans and Direct Unsubsidized Loans would pay an estimated total of $6,953 in interest expenses. As the interest rate would adjust annually, the estimated monthly payment would be $195, or approximately $7 less than under current law. Since S. 897 would not affect the interest rate structure of loans made during AY2014-2015 and future years, if a similar student borrowed the same amount during the four-year period from AY2017-2018 through AY2020-2021, it is estimated that under S. 897, the borrower would pay $7,804 in interest expenses and that the borrower's monthly payment would be $202, the same as under current law.

Parent PLUS Borrower

S. 897 would not affect the interest rate structure for Direct PLUS Loans. Thus, borrowers of Direct PLUS Loans would pay the same amount under S. 897 as under current law.

Senate Amendment to H.R. 1911, the Bipartisan Student Loan Certainty Act of 2013

Table 16. S.A. to H.R. 1911: Summary

Market-Indexed Fixed Rate, With a Cap: Fixed Rate Consolidation Option

Loan & Borrower Type	Interest Rate Formula
Direct Subsidized Loan: undergraduate	10-year Treasury note, plus 2.05%; 8.25% cap
Direct Unsubsidized Loan: undergraduate	10-year Treasury note, plus 2.05%; 8.25% cap
Direct Unsubsidized Loan: graduate and professional	10-year Treasury note, plus 3.60%; 9.5% cap
PLUS Loan: graduate and professional	10-year Treasury note, plus 4.60%; 10.5% cap
PLUS Loan: parent	10-year Treasury note, plus 4.60%; 10.5% cap
Consolidation Loan: all borrower types	Weighted rate of loans being consolidated, rounded up to the next higher 1/8th of 1%; no cap

Source: S. 1334.

Figure 20. S.A. to H.R. 1911 Sub. & Unsub. Loans: Undergrad.

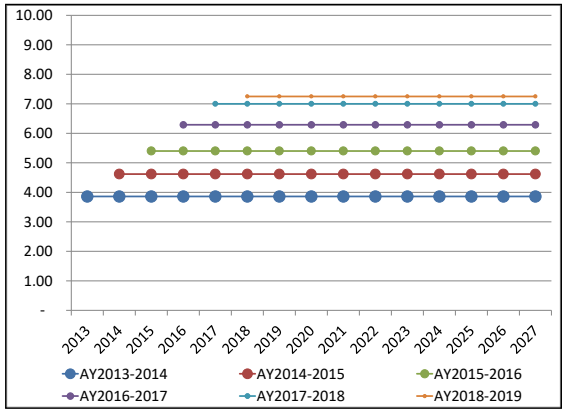


Figure 21. S.A. to H.R. 1911 Unsub. Loans: Grad. & Prof.

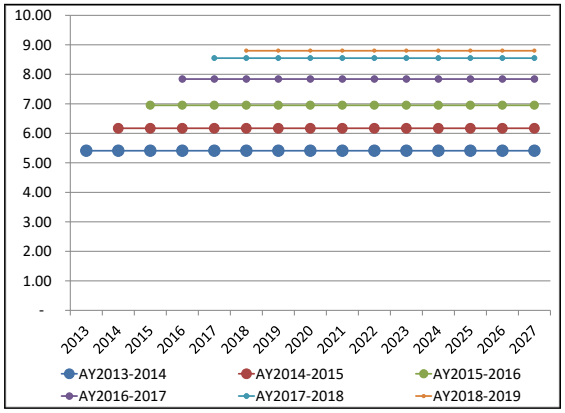
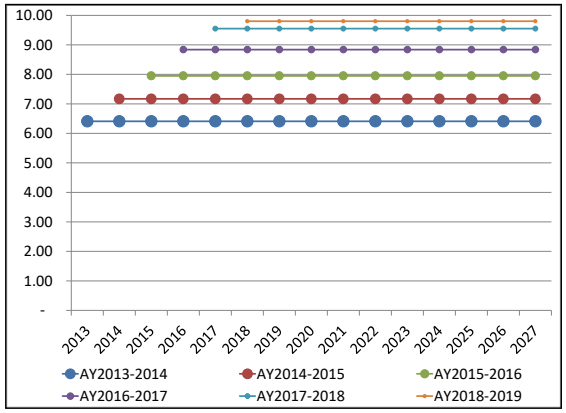


Figure 22. S.A. to H.R. 1911 PLUS Loans



Sources: S.A. to H.R. 1911; and CBO, February 2013 Baseline Forecast.

Notes: Interest rates would adjust once per year on July 1, based on changes in rate on 10-year Treasury notes.

CBO's 2nd quarter 10-year Treasury Note projections have been used as point estimates of future rates. However, the presence of an interest rate cap may alter the expected probability of a borrower facing any possible future interest rate, as the cap would prevent the borrower from facing interest rates above the cap. The use of probabilistic modeling, such as the modeling that may be used by CBO and OMB in preparing cost estimates, may result in lower projected future borrower interest rates when a cap applies. Probabilistic modeling has not been employed in this analysis.

Table 17. S.A. to H.R. 1911: Interest Rates and Borrower Expenses

Case Simulations for Average Amounts Borrowed over Four Years

	Dependent	Independent	Parent
Four years of borrowing: AY2013-2014 through AY2016-2017			
Interest rate	3.86% to 6.29%	3.86% to 6.29%	6.41% to 8.84%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,243	23,420	51,724
Interest paid	5,615	7,762	30,262
Total principal & interest paid	22,106	29,944	73,908
Monthly payment	184	250	616
Four years of borrowing: AY2017-2018 through AY2020-2021			
Interest rate	7.00% to 7.25%	7.00% to 7.25%	9.55% to 9.80%
Cumulative borrowed	16,491	22,182	43,646
Balance at start of repayment	17,649	24,087	54,503
Interest paid	8,309	11,665	41,825
Total principal & interest paid	24,800	33,847	85,471
Monthly payment	207	282	712

Source: CRS analysis

Notes: See **Appendix A**.

Undergraduate Dependent Borrower

Under the Senate amendment to H.R. 1911, an undergraduate dependent student who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $16,491 in combined Direct Subsidized Loans and Direct Unsubsidized Loans would pay an estimated total of $5,615 in interest expenses. The estimated monthly payment would be $184, or approximately $18 less than under current law. Under the Senate amendment to H.R. 1911, interest rates would be indexed to market rates at the time a loan is made and future loans would likely be made with different rates. Based on projected rates, if a similar student borrowed the same amount during the four-year period from AY2017-2018 through AY2020-2021, it is estimated that the borrower would pay $8,309 in interest expenses and that the monthly payment would be $207, or approximately $5 more than under current law.

Parent PLUS borrower

Under the Senate amendment to H.R. 1911, a parent borrower who, during the four-year period from AY2013-2014 through AY2016-2017, borrowed a cumulative total of $43,646 in combined Direct PLUS Loans would pay an estimated total of $30,262 in interest expenses. The estimated monthly payment would be $616, or approximately $18 less than under current law. If a parent borrowed the same amount during the four-year period from AY2017-2018 through AY2020-2021, based on currently projected rates, it is estimated that the borrower would pay $41,825 in interest expenses and that the monthly payment would be $712, or approximately $78 more than under current law.

Student Loan Interest Rate Policy Considerations

During the 113th Congress, a number of factors are contributing to elevated interest in federal policy for setting the interest rates borrowers pay on federal student loans. Many of these factors are interrelated. These factors have often been wrestled with in some shape or form during past deliberations over policies for setting borrower rates. Policy discussions regarding these factors have also often been shaped by broader temporal economic conditions. Some of the major factors that have affected student loan interest rate policy deliberations are briefly discussed below.

Cost to the Government

There are a series of costs associated with making student loans. These costs include the cost of raising capital, loan servicing costs, costs for collecting on delinquent and defaulted loans, and costs for losses due to default or loan discharge. Other costs include lost interest payments from loans that are repaid early and costs for borrower benefits, such as loan forgiveness programs. Some portion of the cost of making loans are passed on to borrowers through the interest they pay on their loans and the fees they are charged (e.g., loan origination fees, costs for collecting on defaulted loans). When the government establishes an interest rate for borrowers to pay, a major consideration centers on the extent to which the borrower will be expected to pay for the costs of the loan. When borrowers pay less than the full cost of a loan, the amount less than the full cost is referred to as the loan subsidy.

The Direct Loan program is a federal credit program. Most of the costs to the government associated with the program are accounted for on an accrual basis according to criteria specified under the Federal Credit Reform Act of 1990 (FCRA; P.L. 101-508).[24] Under FCRA, the net present value of future credit flows associated with the loans are discounted to the fiscal year in which the loans are made using interest rates on Treasury securities with comparable maturities; and these discounted credit flows are expressed as loan subsidy rates. The costs of administering the Direct Loan program are accounted for separately on a cash basis.

Since the early 1980s, there has been a general long-term downward trend in market interest rates; and during the past several years, the government's cost of borrowing has been exceptionally low by historical standards. Since 2006, federal student loans have been made with fixed interest rates. Thus, interest rates on Direct Loans have not moved in tandem with market rates. With the federal government's cost of borrowing near historic lows, CBO projects that federal student loans will be made through the Direct Loan program with a negative subsidy rate for the foreseeable future.[25] In other words, as accounted for according to rules specified under the FCRA, the government expects to earn more through the Direct Loan program than the amount it costs to make the loans.

Potential changes to the terms and conditions of Direct Loans, such as a change in interest rates, would result in a change in future cash flows; and hence a change in loan subsidy rates and the cost to the government of making credit available to student borrowers. Importantly, any potential change to student loan subsidy rates is measured against the current baseline.[26] Thus, any change

[24] For additional information on the FCRA, see CRS Report R42632, *Budgetary Treatment of Federal Credit (Direct Loans and Loan Guarantees): Concepts, History, and Issues for the 112th Congress*, by James M. Bickley.

[25] Congressional Budget Office, CBO May 2013 Baseline Projections for the Student Loan Program, May 14, 2013.

[26] For details on the current student loan baseline, see Congressional Budget Office, "CBO May 2013 Baseline Projections for the Student Loan Program," May 14, 2013.

that would reduce the currently projected negative subsidy rate would be considered an increase in direct spending relative to the current baseline.

Fair-Market or Below-Market Rates

One of the central aims of the federal student loan programs has been to ensure access to loans that can enable students and their families to finance the costs of a postsecondary education. Thus, there are no requirements for student borrowers to pass a credit check, demonstrate a source of income, or obtain a co-signer to obtain Direct Subsidized Loans and Direct Unsubsidized Loans. Individuals with adverse credit histories, however, are not eligible for Direct PLUS Loans unless they secure an endorser.

In addition to making access to student loans widely available for certain types of borrowers (e.g., high-need borrowers), and during certain time periods, the federal government has sought to provide subsidies to borrowers in the form of below-market borrower interest rates or by paying the interest or part of the interest on the borrower's behalf. A perennial set of issues has pertained to how heavily the government should subsidize the interest payments for borrowers and how widely these subsidies should be extended (e.g., across how many types of borrowers and loans).

For the student loans currently being made through the Direct Loan program, fixed interest rates are specified in a manner that does not adjust to account for variations in market conditions, nor borrower repayment risk. The current fixed interest rate structure does provide borrowers with certainty regarding the interest rates that will apply for the duration that their loans are in effect. However, borrowers neither benefit from lower borrowing costs during periods of low market interest rates, nor face increased costs during periods of high market rates. Also, within each loan type, the interest rates charged to borrowers are unaffected by factors such as their individual credit risk or the program of study for which they borrow.

Interest Rate Structure

Throughout the history of the federal student loan programs, there have been two prevalent structures used for setting the rates borrowers pay: statutorily specified fixed interest rates and market-indexed variable interest rates. Several of the policy options being considered during the 113th Congress propose a market-indexed, fixed interest rate structure.

Student loans with fixed interest rates and variable interest rates present different benefits and risks to borrowers and to the government (i.e., the lender). For borrowers, fixed rate loans offer the benefit of predictability, as loan payments will not change as a result of variations in prevailing interest rates. However, depending on the interest rate environment, fixed rate loans may present borrowers with interest rates that are either higher or lower rates than prevailing rates. For the government, it is difficult to accurately predict future interest rates. If interest rates are statutorily specified for loans that will be made in future years based on then-current prevailing rates, there remains the risk that the interest rate environment may be substantially different by the time future loans are made. This is the situation currently at hand.

Market-Indexed, Variable Rate Structure

A variable interest rate structure would align the rates borrowers pay with market conditions throughout the period that their loans are in effect. This approach would also more closely align the interest rate structure on federal student loans with some other forms of unsecured consumer credit that carry variable interest rates (e.g., private education loans, credit cards). For borrowers

who take out loans over multiple years, the same interest rate structure would apply to all their loans of similar type.

With a variable rate structure, however, borrowers would be subject to future fluctuations in market rates unknowable to them at the time they borrow. A monthly payment amount that a borrower may have perceived to be manageable based on the rate in effect at the time the loan is first disbursed may be perceived as excessive should rates adjust upwards. These concerns may be mitigated by procedures such as a cap on the maximum interest rate. In addition, repayment plans such as the income-based repayment (IBR)[27] may afford repayment relief to affected borrowers.

Given the current interest rate environment, borrower interest rates are projected to be lower initially than the statutorily specified fixed interest rates currently applicable to student loans. However, as CBO projects that rates on Treasury securities will rise in future years, interest rates would likely be adjusted upwards in future years—affecting both loans made during the low-interest rate environment projected for the near term, as well as loans made after rates are projected to begin rising.

Market-Indexed, Fixed Rate Structure

A market-indexed, fixed-rate structure would align the rates borrowers pay with market conditions at the time of loan origination, but rates would remain fixed for the life of the loan. This approach would more closely align the rates borrowers pay with market conditions at the time they borrow each of their loans. It would be somewhat similar to the way rates are set on fixed-rate mortgages.

With a fixed rate structure, borrowers would be insulated against fluctuations in market rates that occur after their loans are made. However, since a new rate would be established for loans made during each award year, borrowers who take out loans over multiple years would likely have a series of loans that each has a different interest rate. Additionally, should rates drop during the years after a loan is made, the borrower would be unable to benefit from a lower interest rate environment.

Given the current interest rate environment, borrower interest rates would generally be lower initially than the fixed interest rates currently applicable to student loans. However, as noted earlier, CBO projects that rates on 10-year Treasury notes will rise in future years, resulting in interest rates on future loans being higher than currently applicable rates.

[27] For additional information on the IBR plan, see CRS Report R40122, *Federal Student Loans Made Under the Federal Family Education Loan Program and the William D. Ford Federal Direct Loan Program: Terms and Conditions for Borrowers*, by David P. Smole.

Appendix A. Description of Borrower Cases and Technical Notes

This appendix presents information on the construction of the three cases used to exemplify borrowing patterns of typical borrowers for purposes of the case simulations used in the analysis of the student loan interest rate policy options presented above. It also presents technical notes detailing assumptions that were made in the analysis of the student loan interest rate policy options examined in this report.

Estimates of Average Amounts Borrowed by Prototypical Borrowers

The undergraduate student borrower cases used for the analysis in this report were constructed using estimates of average cumulative amounts borrowed by students over differing multi-year periods of undergraduate study. Estimates of average amounts borrowed are from the 2007-2008 National Postsecondary Student Aid Study (NPSAS:08), which is the most recent NPSAS survey available from the U.S. Department of Education.28 For each year, it is assumed that students borrow the year-on-year difference in the average cumulative amount borrowed by undergraduate students, based on the total number of years borrowers have received either Subsidized or Unsubsidized Loans.

The parent borrower case was constructed in a slightly different manner because the NPSAS:08 data are not compiled in a way that allows for a determination of the total number of years a parent has borrowed a Parent PLUS Loan. For the parent borrower case, estimates of average amounts borrowed are based on the average Parent PLUS Loan amount borrowed on behalf of undergraduate dependent students for the first through fourth years of undergraduate study.

Estimates of average amounts borrowed by undergraduate dependent students, undergraduate independent students, and parent borrowers are presented in Table A-1.

Table A-1. Student Loans: Average Amounts Borrowed per Year, by Loan Type

NPSAS: 2007-2008

Undergraduate Student's Year in School	Loan Type	Borrower Type		
		Undergraduate Dependent	Undergraduate Independent	Parent
1st year	Subsidized	2,207	2,631	—
	Unsubsidized	1,430	2,278	—
	PLUS	—	—	10,399
2nd year	Subsidized	2,268	3,054	—
	Unsubsidized	1,377	2,595	—
	PLUS	—	—	11,165
3rd year	Subsidized	2,624	3,061	—
	Unsubsidized	1,510	2,493	—

[28] Data from the NPSAS:12 survey, covering the 2011-2012 academic year, are not expected to be released until the summer or fall of 2013.

Undergraduate Student's Year in School	Loan Type	Borrower Type		
		Undergraduate Dependent	Undergraduate Independent	Parent
	PLUS	—	—	11,061
4th year	Subsidized	3,346	3,452	—
	Unsubsidized	1,729	2,618	—
	PLUS	—	—	11,021
Cumulative	Subsidized	10,445	12,198	—
	Unsubsidized	6,046	9,984	—
	PLUS	—	—	43,646
	TOTAL	**16,491**	**22,182**	**43,646**

Source: U.S. Department of Education, National Center for Education Statistics, 2007-08 National Postsecondary Student Aid Study (NPSAS:08); CRS analysis.

Notes: For undergraduate dependent and independent students, amounts shown are the year-on-year difference in the average cumulative amount borrowed by undergraduate dependent students, based on the number of years Stafford Loans were borrowed. For instance, for this analysis, it is assumed the amount borrowed in the second year is the difference between the average total cumulative amount borrowed over two years and the average amount borrowed over one year.

For parent borrowers, amounts shown are estimates of average Parent PLUS Loan amounts borrowed on behalf of undergraduate dependent students for the first through fourth years of undergraduate study. Because nuanced data on cumulative PLUS Loan borrowing by student year in school are not available, average annual PLUS Loan amounts were summed to construct estimated cumulative amounts borrowed per year in school.

Additional Technical Notes and Assumptions

In preparing estimates involving market-indexed loans, the amount of interest projected to accrue is highly dependent on future rates of 10-year Treasury notes. For the simulations presented here, all calculations use the actual high-yield rate of 1.81% from the May 8, 2013 auction for the period from July 2013 through June 2014; and CBO projections of 10-year Treasury note interest rates (2nd quarter) for future periods. CBO's projections do not extend past 2023. Projected rates for 2023 are used for future years.

Comparisons between policy options that involve market-indexed rates and current law would be impacted by any differences in actual rates from the projected rates used in these simulations. In addition, fluctuations in market-rates would have different effects on the rates borrowers pay under a market-indexed, fixed rate structure than under a market-indexed, variable rate structure. Unfortunately, these differences are masked when projected rates are held at constant levels for future years.

The following loan characteristics were assumed in this analysis:

- Loans are disbursed in two equal disbursements. The first disbursement occurs on September 1 and the second occurs on January 1. Interest starts to accrue on Direct Unsubsidized Loans and Direct PLUS Loans once a disbursement is made.
- Interest accrues during the grace period on Direct Subsidized Loans disbursed during AY2013-2014; and on all Direct Unsubsidized Loans and PLUS Loans.

- Borrowers defer payment of the interest that accrues while in school and during the grace period. This interest is capitalized at the beginning of the repayment period, which begins after the six-month grace period.
- Loans are repaid according to a standard 10-year repayment plan.
- The interest rate on market-indexed variable rate loans adjusts July 1 of each year and remains in effect for the remainder of the year.
- On variable rate loans, monthly payments may increase or decrease with changes in the interest rate.
- 'Interest paid' includes interest that accrues while in school and during the grace period, which is capitalized at the beginning of repayment; and interest that accrues and is paid during repayment according to the standard (10-year) repayment plan.
- The interest rate on market-indexed fixed rate loans is established effective July 1 of each year and remains in effect for the life of the loan.

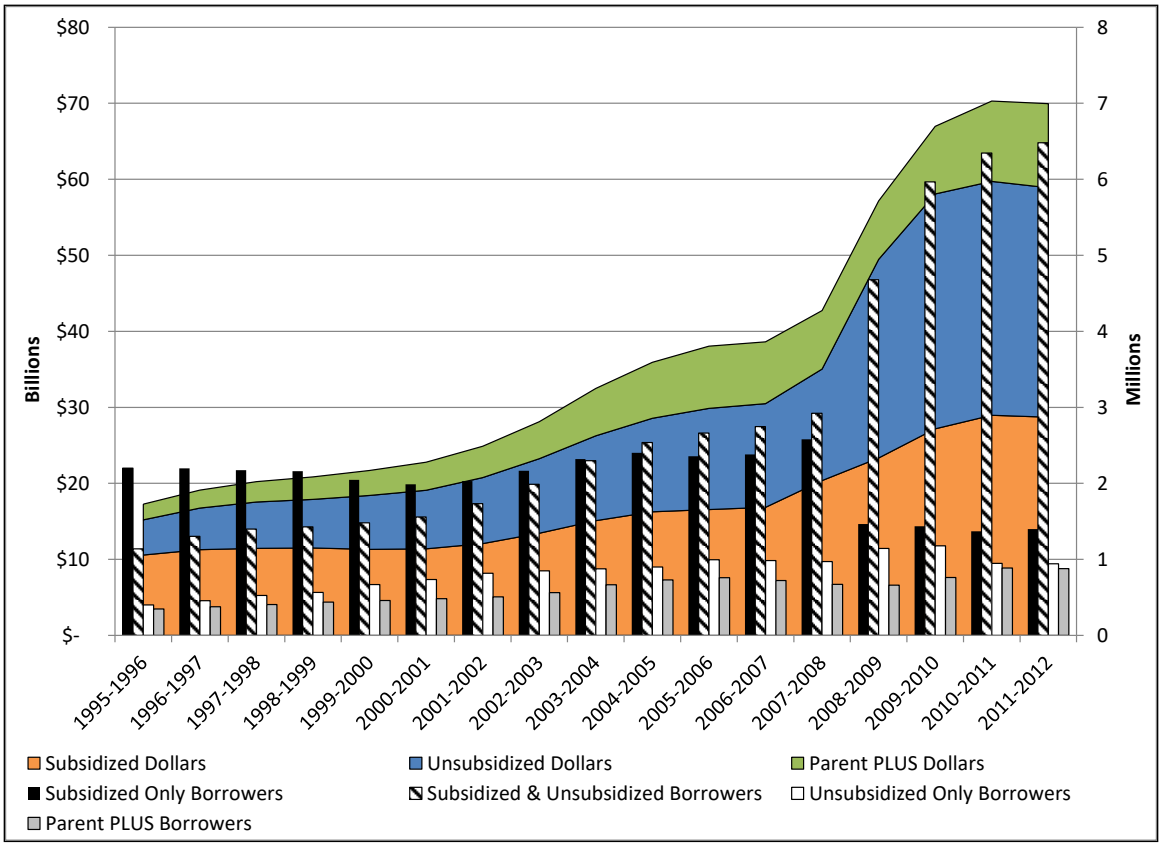
Appendix B. Historical Data on Federal Student Loans and Borrowers

Figure B-1 and **Figure B-2** present trend data spanning the past quarter century that show changes in the number of individuals who borrow different loan types and in the total amounts of different loan types borrowed. Data on borrowing for undergraduate and graduate education are presented separately.

The information presented in **Figure B-1** shows that over the period from AY1995-1996 through AY2007-2008, there was a gradual increase in the total amount of loans borrowed. There also was a gradual increase in the number of students who borrowed Unsubsidized Loans—both the number who borrowed both Subsidized Loans and Unsubsidized Loans, and the number who borrowed only Unsubsidized Loans.

Figure B-1. Annual Undergraduate Borrowing

AY1995-1996 through AY2011-2012



Source: The College Board, Trends in Student Aid, 2012, Table 6A. Underlying data provided to The College Board are from the U.S. Department of Education, Office of Postsecondary Education, National Student Loan Data System (NSLDS), and were extracted August 30, 2012.

Notes: Data presented in **Figure B-1** includes both FFEL and Direct Loans. 'Subsidized Only Borrowers' borrowed Subsidized Loans, but not Unsubsidized Loans. 'Subsidized & Unsubsidized Borrowers' borrowed both Subsidized Loans and Unsubsidized Loans. 'Unsubsidized Only Borrowers' borrowed Unsubsidized Loans, but not Subsidized Loans.

Beginning with AY2008-2009, and following the enactment of the Ensuring Continued Access to Student Loans Act of 2008 (ECASLA; P.L. 110-227), there has been a marked change in the nature of undergraduate borrowing.[29] The ECASLA amendments to the HEA increased the annual total that undergraduate students could borrow in Unsubsidized Loans by $2,000. As a consequence of this change, the number of students who borrow Unsubsidized Loans increased substantially. During AY2011-2012, the most recent year for which data are available, there were approximately 8.8 million undergraduate borrowers of Direct Loans. Nearly 7.9 million of these borrowers (89%) obtained Direct Subsidized Loans; however, only 1.4 million (16%) borrowed only Direct Subsidized Loans. Approximately 7.4 million undergraduate borrowers (84%) obtained Direct Unsubsidized Loans, although only 0.9 million (11%) borrowed only Direct Unsubsidized Loans. It was most common for student borrowers to borrow both loan types. Nearly 6.5 million students (73%) did so in AY2011-2012.

In AY2011-2012, there were 879 thousand borrowers of Parent PLUS Loans.

Figure B-2 shows historical data on graduate student borrowing. Graduate student borrowing began to increase most notably following the enactment of the Higher Education Reconciliation Act of 2005 (HERA; part of P.L. 107-171) which extended eligibility to borrow PLUS Loans to graduate and professional students. During most of the past five award years, there was a marked increase on graduate student borrowing of all Direct Loan types. However, graduate student borrowing of Direct Subsidized Loans and Direct Unsubsidized Loans decreased slightly in AY2011-2012 compared with the prior year. Beginning with AY2012-2013, graduate students are no longer eligible to borrow Direct Subsidized Loans.

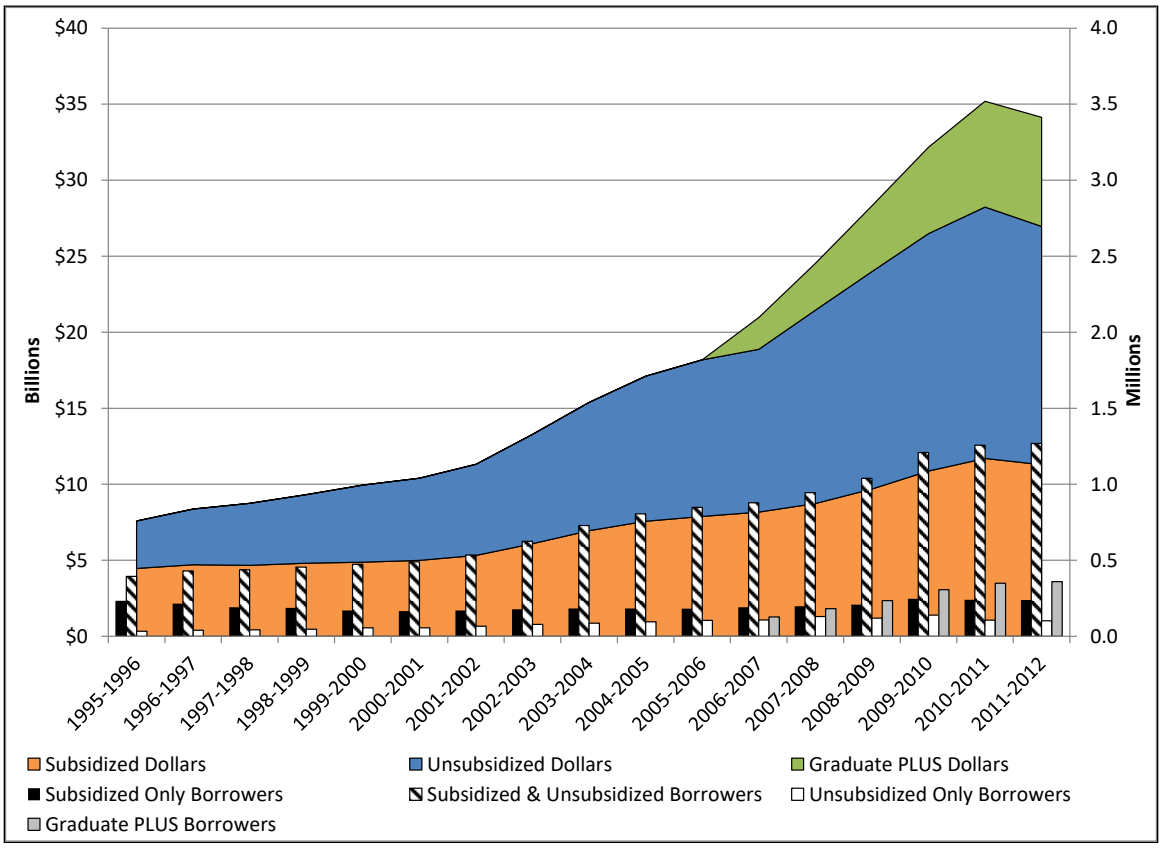
During AY2011-2012, 1.6 million graduate students borrowed either a Direct Subsidized Loan and/or a Direct Unsubsidized Loan. Of these borrowers, 1.5 million (94%) obtained Direct Subsidized Loans; however, only 239 thousand (15%) borrowed only Direct Subsidized Loans. Nearly 1.4 million graduate student borrowers (85%) obtained Direct Unsubsidized Loans, although only 102 thousand (6%) borrowed only Direct Unsubsidized Loans. As with undergraduate students, it was most common for graduate student borrowers to borrow both loan types. Nearly 1.3 million graduate students (79%) did so in AY2011-2012.

Approximately 360 thousand graduate students borrowed Direct PLUS Loans. Students typically do not borrow PLUS Loans without exhausting their eligibility for Direct Subsidized Loans and Direct Unsubsidized Loans because PLUS Loans have higher interest rates.

[29] For additional information on ECASLA, see CRS Report RL34452, *The Ensuring Continued Access to Student Loans Act of 2008*, by David P. Smole.

Figure B-2. Annual Graduate Student Borrowing

AY1995-1996 through AY2011-2012



Source: The College Board, Trends in Student Aid, 2012, Table 6B. Underlying data provided to The College Board are from the U.S. Department of Education, Office of Postsecondary Education, National Student Loan Data System (NSLDS), and were extracted August 30, 2012.

Notes: Data presented in **Figure B-2** includes both FFEL and Direct Loans. 'Subsidized Only Borrowers' borrowed Subsidized Loans, but not Unsubsidized Loans. 'Subsidized & Unsubsidized Borrowers' borrowed both Subsidized Loans and Unsubsidized Loans. 'Unsubsidized Only Borrowers' borrowed Unsubsidized Loans, but not Subsidized Loans. 'Graduate PLUS Borrowers' borrowed Graduate PLUS Loans and may have borrowed Subsidized and/or Unsubsidized Loans. In general, a student would have borrowed his or her Subsidized and Unsubsidized Loan eligibility before borrowing a PLUS Loan.

Author Information

David P. Smole
Specialist in Education Policy

Disclaimer